

Tri Flood MK II  
15x15 W RGB

LED floodlight

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# 1 General notes



This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device, include the manual for the next owner.

Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.

## **Symbols and signal words**

This section provides an overview of the symbols and signal words used in this user manual.

Signal word	Meaning
<b>DANGER!</b>	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
<b>WARNING!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
<b>NOTICE!</b>	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.

Warning signs	Type of danger
 A yellow triangular warning sign with a black border. Inside the triangle is a black silhouette of a person standing next to a rectangular object (a load) that is being lifted by a crane hook and cables.	Warning – suspended load.
 A yellow triangular warning sign with a black border. Inside the triangle is a large black exclamation mark.	Warning – danger zone.

## 2 Sicherheitshinweise

### Intended use

This device is intended to be used as an electronic illumination effect using LED technics. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

### Sicherheit



#### **DANGER!**

#### **Danger for children**

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.





**DANGER!**

**Electric shock caused by high voltages inside**

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.



**DANGER!**

**Electric shock caused by short-circuit**

Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



**WARNING!**

**Eye damage caused by high light intensity**

Never look directly into the light source.

**WARNING!****Risk of epileptic shock**

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.

**NOTICE!****Risk of fire**

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.

**NOTICE!****Operating conditions**

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.



**NOTICE!**

**Power supply**

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

### 3 Features

The LED floodlight is specially suited for professional lighting tasks, such as at events, on rock stages, in theatres and musicals, in discos or for architectural and garden illumination.

Special features of this device:

- 15 tricoloured LEDs (15 W each)
- Control via DMX (5 different modes) and via buttons and display on the unit
- Preprogrammed automatic shows
- Master / slave operation
- Robust black metal housing
- Outdoor usability, IP65

## 4 Installation

Unpack and check carefully there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

You can install the device on the wall, ceiling or floor. A mounting bracket is included in the package.

**WARNING!****Risk of injury caused by falling objects**

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



### **NOTICE!**

#### **Risk of overheating**

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



### **NOTICE!**

#### **Use of stands**

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.

**NOTICE!****Possible data transmission errors**

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX output to audio devices such as mixers or amplifiers.

**DMX connections**

The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for pin assignment.

1	Ground, shielding
2	DMX data (-)
3	DMX data (+)

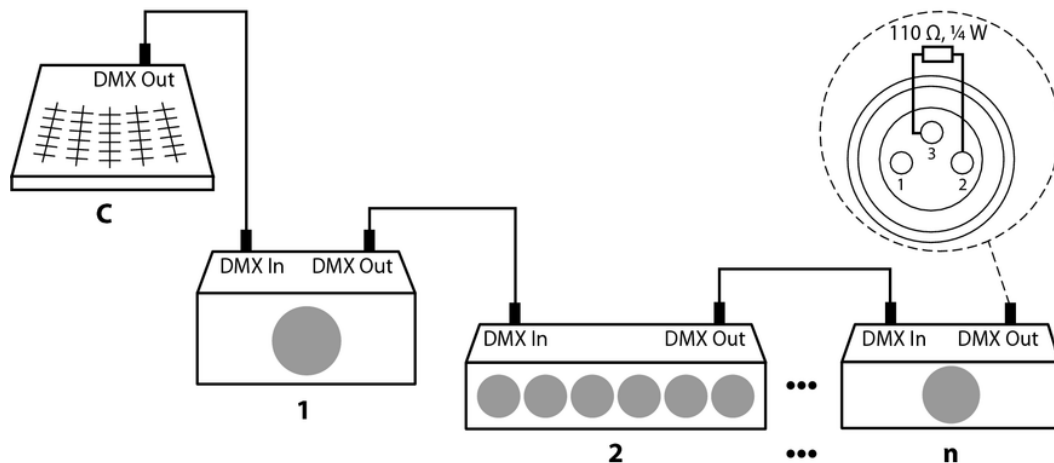
## 5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible high-quality cables for all connections.



## Connections in DMX mode

Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor ( $110\ \Omega$ ,  $\frac{1}{4}\text{ W}$ ).

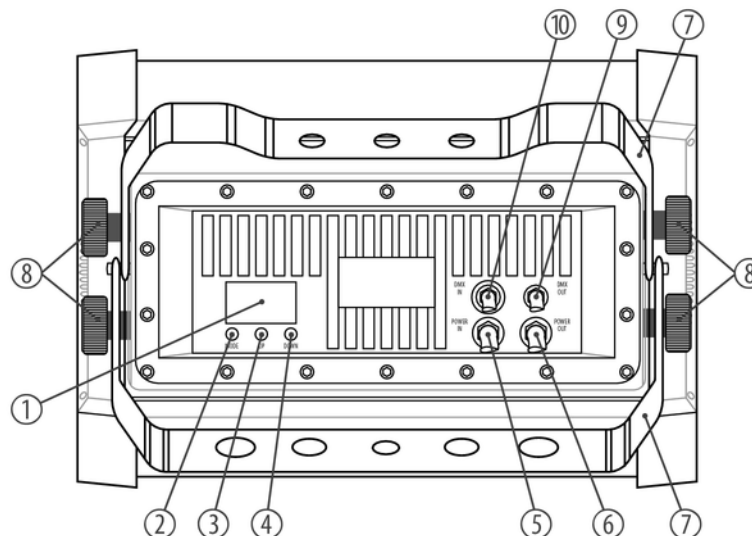


### **Connections in master/slave mode**

When you configure a group of devices in master/slave mode, the first unit will control the other units for an automatic, sound-activated, synchronized show. This function is ideal when you want to start a show immediately. Connect the DMX output of the master device to the DMX input of the first slave device. Then connect the DMX output of the first slave device to the DMX input of the second slave device and so on.

## 6 Connections and operating elements

### Rear panel



Tri Flood MK II 15x15 W RGB

1	Display.
2	<i>[MODE]</i> button Activates the main menu or a submenu respectively.
3	<i>[UP]</i> button Increases the displayed value by one.
4	<i>[DOWN]</i> button Decreases the displayed value by one.
5	<b>POWER IN</b> Cable with special threaded coupling connector for mains power connection.
6	<b>POWER OUT</b> Cable with special threaded coupling connector to feed further units with mains power.
7	Bracket for setup or hanging.
8	Locking screw for the bracket.

9 **DMX OUT**

Cable with DMX outdoor threaded coupling connector as DMX output for further units.

10 **DMX IN**

Cable with DMX outdoor threaded coupling connector as DMX input.

## 7 Operation

### 7.1 Starting up the device

Connect the unit to the power grid to start the operation. After a few seconds the display shows a running reset. Then the unit is ready for use.

### 7.2 Main menu

Press the *[MODE]* button to activate the main menu and select an operating mode. Use the buttons *[UP]* and *[DOWN]* to change the respectively shown value. When the display shows the desired value, press the *[MODE]* button.

If you don't press any button for about one minute, the unit returns to the previously selected mode. The set values are retained even when the device is disconnected from the mains power supply.

## DMX address

Press the *[MODE]* button repeatedly until the top row of the display shows 'DMX ADD'. Now you can set the number of the first DMX channel to be used by the device (DMX address). Use the buttons *[UP]* and *[DOWN]* to select a value between 1 and 512 (the bottom row of the display shows 'A001' ... 'A512').

When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

Make sure that the set DMX address matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the different DMX modes.

DMX mode	Channels	Highest possible DMX address
1	1	512
2	2	511
3	3	510
4	5	508

DMX mode	Channels	Highest possible DMX address
5	7	506
6	7	506

### Display settings

Press the *[MODE]* button repeatedly until the top row of the display shows '*SETUP*'. Now you can use the *[UP]* and *[DOWN]* buttons to select one of the following options:

- '*DISP ON*': The backlight of the display stays permanently on.
- '*DISP OFF*': The backlight of the display turns off when no button is pressed for ten seconds.
- '*TEMP xxx*': The display shows the temperature inside the unit.

When the display shows the desired option, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.



## Master mode

Repeatedly press the *[MODE]* button until the top row of the display shows 'SETUP'. Now you can use the *[UP]* and *[DOWN]* buttons to select the options for the Master mode:

- 'MAST ON': Master mode is on, the unit operates as Master.
- 'MAST OFF': Master mode is off.

This setting is only relevant if the unit is not controlled by DMX. The device can control connected devices of the same type, that have to be configured as Slaves.

When the display shows the desired value, press the *[MODE]* button to confirm the selection and to return to the parent menu. To return there without any changes, wait a minute.

## Manual dimmer

Press the *[MODE]* button repeatedly until the top row of the display shows 'SETUPDIM'. Now you can use the *[UP]* and *[DOWN]* buttons to adjust the brightness in a range of 0 % to 100 %. This setting overrides the brightness setting that can be controlled by DMX.

When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### **Manual colour setting**

Press the *[MODE]* button repeatedly until the top row of the display shows 'COLORSET' and the bottom row 'xxx% RED', 'xxx% GRE' (green) or 'xxx% BLU' (blue). Now you can use the *[UP]* and *[DOWN]* buttons to adjust the brightness of the respective basic colour in the range from 0 % to 100 %. This brightness setting of the basic colours overrides the settings that can be controlled by DMX.

### **Resetting to factory defaults**

Press the *[MODE]* repeatedly until the top row of the display shows 'RESET'. If you now press one of the *[UP]* and *[DOWN]* buttons for at least three seconds, the unit carries out a reset.

## DMX or slave mode

Press the *[MODE]* button repeatedly until the top row of the display shows 'DMX'. Now you can use the *[UP]* and *[DOWN]* buttons to select one of the following operating modes:

- 'MODE1' (DMX mode 1, one channel)
- 'MODE2' (DMX mode 2, two channels)
- 'MODE3' (DMX mode 3, three channels)
- 'MODE4' (DMX mode 4, five channels)
- 'MODE5' (DMX mode 5, seven channels)
- 'MODE6' (DMX mode 6, seven channels)
- 'SLAVE' (Slave operation); this setting is only relevant if the unit is operated as slave by a master, but is not controlled via DMX.

When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### Operating mode 'Preprogrammed automatic show'

Press the *[MODE]* button repeatedly until the top row of the display shows '*PROGRAM*'. Use the buttons *[UP]* and *[DOWN]* to select one of the preprogrammed automatic shows listed in the following table.

Programme	Show
001	Colour chase (three colours)
002	Colour chase (seven colours)
003	Colour junction (three colours)
004	Colour junction (seven colours)
005	Coloured strobe light (strobe, three colours)
006	Fast colour change (three colours)
007	Fast colour change (seven colours)
008	Smooth colour change (six colours)

This setting is only relevant if the unit is not controlled via DMX. The device can operate in standalone mode or control connected devices of the same type that have to be configured as 'Slaves'. When the display shows the desired value, press the *[MODE]* to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### Programme speed

Press the *[MODE]* button repeatedly until the top row of the display shows 'SPEED'. Now you can adjust the speed for the preprogrammed automatic shows. Use the buttons *[UP]* and *[DOWN]* to select either '000' (programme stopped) or a value between '001' and '031' (lowest to highest programme speed).

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### Microphone sensitivity

Press the *[MODE]* button repeatedly until the top row of the display shows 'SOUND'. Now you can adjust the sensitivity of the built-in microphone for the sound control. Use the buttons *[UP]* and *[DOWN]* to select either 'SENS 000' (microphone off) or a value between 'SENS 001' and 'SENS 031' (lowest to highest sensitivity).

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### Temperature monitoring

Press the *[MODE]* button repeatedly until the top row of the display shows 'COOLMODE'. Now you can use the *[UP]* and *[DOWN]* buttons to choose one of three different options for temperature monitoring:

- 'STUDIO': The brightness of the LEDs is always adjusted to 70 %. As soon as the temperature inside the unit exceeds 70 °C, the fan turns on and the brightness is further reduced. This lets the unit cool down automatically.
- 'REGULATE': The brightness of the LEDs is always set at 100 %, as long as the temperature inside the unit is below 60 °C. At a higher temperature, the brightness is reduced. As soon as the temperature exceeds 48 °C, the fan turns on.
- 'POWER': The brightness of the LEDs is always set at 100 %, as long as the temperature inside the unit is below 70 °C. At a higher temperature, the brightness is reduced. The fan runs continuously.

When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

### Device version

Press the *[MODE]* button repeatedly until the top row of the display shows 'VERSION'. In the bottom row, the display shows the number of the installed device software.

Press the *[MODE]* button, to return to the parent menu or wait a minute.

## Keylock

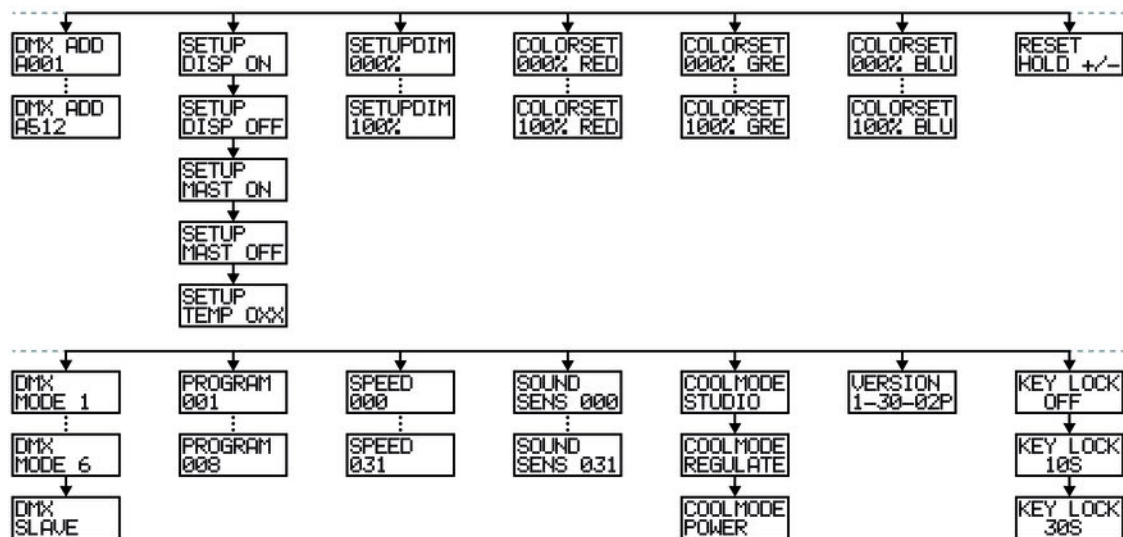
Press the *[MODE]* button repeatedly until the top row of the display shows 'KEY LOCK'. Now you can use the *[UP]* and *[DOWN]* buttons to choose one of three different settings available:

- 'OFF': The keys are unlocked.
- '10S': If you don't press any button for 10 seconds, the keys will be locked.
- '30S': If you don't press any button for 30 seconds, the keys will be locked.

When the display shows the desired value, press the *[MODE]* button to confirm the selection and return to the parent menu. To return there without changes, wait a minute.

To unlock the keys, keep the buttons *[UP]* and *[DOWN]* pressed for two seconds.

## 7.3 Menu overview





## 7.4 Functions in DMX mode 1

Channel	Value	Function
1	Automatic colour change	
	0...6	Blackout
	7...13	Macro 1
	⋮	
	245...255	Macro 36

## 7.5 Functions in DMX mode 2

Channel	Value	Function
1	Automatic colour change	
	0...6	Blackout
	7...13	Macro 1
	⋮	
	245...255	Macro 36
2	0...255	Dimmer (0 % to 100 %)

## 7.6 Functions in DMX mode 3

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)

## 7.7 Functions in DMX mode 4

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)

Channel	Value	Function
4	Strobe effect	
	0...7	Full brightness, no strobe effect
	8...255	Strobe effect, increasing speed (1...12 Hz)
5	0...255	Dimmer (0 % to 100 %)

## 7.8 Functions in DMX mode 5

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)
4	Strobe effect	

Channel	Value	Function
	0...15	Full brightness, no strobe effect
	16...255	Strobe effect, increasing speed (1...12 Hz)
5	0...255	Dimmer (0 % to 100 %)
6	Operating mode selection	
	0...31	Off
	32...63	Slowly increasing brightness
	64...95	Slowly decreasing brightness
	96...127	Slowly alternating increasing brightness, then slowly decreasing
	128...159	Automatic colour change typ 1
	160...191	Automatic colour change typ 2 (3 colours)
	192...223	Automatic colour change typ 3 (7 colours)
	224...255	Sound control
7	0...255	Speed of the effect set by channel 6, if channel 6 = 32...223

## 7.9 Functions in DMX mode 6

Channel	Value	Function
1	0...255	Intensity red (0 % to 100 %)
2	0...255	Intensity green (0 % to 100 %)
3	0...255	Intensity blue (0 % to 100 %)
4	Automatic colour change	
	0...7	Macro 1
	⋮	
	247...255	Macro 36
5	Strobe effect	
	0...7	Full brightness, no strobe effect
	8...255	Strobe effect, increasing speed (1...12 Hz, if channel 6 = 32...191)
6	Operating mode selection	

Channel	Value	Function
	0...31	Off
	32...63	Slowly increasing brightness
	64...95	Slowly decreasing brightness
	96...127	Slowly alternating increasing brightness, then slowly decreasing
	128...159	Smooth colour change, speed depends on channel 5
	160...191	Automatic colour change (3 colours), speed depends on channel 5
	192...255	Sound control
7	0...255	Dimmer (0 % to 100 %)

## 8 Technical specifications

LEDs	15 × 15 W, tricoloured (RGB)
Dispersion angle	approx 40 °
Number of DMX channels	1, 2, 3, 5 or 7
Operating voltage supply	AC 230 V ~, 50 Hz
Power consumption	270 W
Protection class	IP65
Dimensions (W × D × H)	445 mm × 310 mm × 200 mm
Weight	13.0 kg



## 9 Troubleshooting

**NOTICE!****Possible data transmission errors**

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:

Symptom	Remedy
The unit does not work, no light.	Check the mains connection and the fuse.
No response to the DMX controller.	1. Check the DMX ports and cables for proper connection.
	2. Check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at [www.thomann.de](http://www.thomann.de).

## 10 Cleaning

### Optical lenses

Clean the exterior of accessible optical lenses periodically to optimise light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using normal glass cleaning products.
- Always dry the parts carefully.

## 11 Protecting the environment

### Disposal of the packaging material



For the transport and protective packaging, environmentally friendly materials have been chosen that can be supplied to normal recycling.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.

### Disposal of your old device



This device is subject to the European directive 2002/96/EC.

Do not dispose of the device with your normal household waste.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

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